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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,973	01/25/2002	Tominari Araki	UNIU51.001AUS	3883

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EXAMINER
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DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 11/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/056,973

Applicant(s)

ARAKI ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to request for new Office Action*

The preliminary amendment is now examined below. Accordingly, this is a non-final Office Action. Cancellation of claims 1-9 is acknowledged.

### *Claim Objections*

1. Claim 35 is objected to because of the following informalities: "The" is misspelled. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10-11, 13-20, 25-30, 32-39, and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,750,267 to Takase et al. in view of USPN 5,047,272 to Hassel et al.
4. Takase teaches a transparent conductive laminate comprised of a multilayer transparent conductive laminate formed of a transparent substrate (2), electrode (4), transparent protective films (6) and (7), applicable to reflective film for a window by utilizing its conductivity and optical properties (col. 7, line 65-col. 8, line 2). More particularly, it relates to a transparent panel heater which can be used in liquid crystal displays, refrigerator showcases, freezer showcases, defrosters for windshields of cars and the like, and a transparent laminate for use in the transparent panel heater (all equivalent to an optical member), see col. 1, lines 10-15. Takase describes as the first transparent resin protective layer, any protective layer is

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acceptable, so long as it has a light transmission of 70% or more, preferably 80% or more at a wavelength of 550 nm (falling in Applicant's range of not less than 90%/92%/94%/96% with ink information on an optical member in instant claims 10, 25-27, 30, and 44-46). See col. 6, lines 57-68 and Examples 1-12. Examples of such a first transparent resin protective layer include layers obtained by applying and then curing an ultra-violet-setting resist transparent ink. The first transparent protective layer was applied excluding over portions of metallic electrodes and a second transparent protective layer was applied to the laminated film in Examples 6-8 (equivalent to information is on a surface of an optical member regarding claim 29). The transparent substrate includes polyesters such as polyethylene terephthalate (PET) and polyethylene naphthalate (PEN) (see col. 4, lines 1-5). The transmission of the film is between 75% to 89% in Examples 1-3 without the ink information on it (falling in Applicant's range of the optical transmittance of portion without ink information is no less than 80%/90% in instant claims 11 and 30). The material with ink and without ink provide various different materials as cited above (addressing instant claims 28 and 47). A separator and adhesive is adhered to at least one side of the optical member of Takase at col 7, lines 56-60 and Figures 8a and 8b (instant claims 14-15 and 33-34).

Takase does not refer to ink that is used for identification, however, this goes to intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Additionally, ink is generally used to print information.

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Takase does not teach an easy-releasing protective member as instant claims 10 and 30. Hassel teaches transparent laminates for polarizing films, displays and optical elements at col. 7, lines 5-10. The laminate of Hassel discloses at col. 7, lines 50-56, a easy-releasing protective member (laminated on both sides with a poorly adhering, removable outer film) for protecting the laminate from contamination and transporting. The layer is transparent (col. 4, lines 9-10). See also patented claim 12 claiming an easily removable protective outer layer. Also note the same polymer as Applicant uses, cellulose triacetates (triacetylcellulose), is used as the outer protective layer at col. 4, lines 29-30. It would have been obvious to one of ordinary skill in the art to modify the transparent laminate of Takase to substitute an easy-releasing protective member because Hassel teaches an easy-releasing protective layer is used in transparent laminates for protecting the laminate from contamination and transporting as cited above.

Takase does not teach an easy-releasing protective member thickness as instant claims 16-19 and 35-38. Hassel's Example 6 teaches the thickness of the outer easy-releasing layer is 70 microns, falling in Applicant's range 1-500 microns as instant claims 16-19 and 35-38. It would have been obvious to one of ordinary skill in the art to modify the laminate of Takase to provide a thickness between 1 and 500 microns because Hassel teaches 70 microns is a suitable and conventional thickness for easy-releasing protective members.

Takase does not teach an optical material comprising a polarizing plate as instant claims 13, 20, 32, and 39. Hassel teaches using the transparent laminates used with polarizing plates as cited at col. 7, lines 5-10 and Example 10 (use example). It would have been obvious to one of ordinary skill in the art to modify the laminate of Takase to include a polarizer because Hassel teaches producing a polarizer with a polyvinyl alcohol film, laid between polyurethane sides of

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two 2 glass sheets creating a polarizer as explained in the Example 10 of Hassel and as further cited at col. 3, lines 30-40 of Hassel.

12. Claims 12 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,750,267 to Takase et al. in view of USPN 5,047,272 to Hassel et al. and further in view of USPN 5,856,048 to Tahara et al.

Takase is relied upon above. Takase does not teach an ink emits fluorescence. Tahara teaches information-recorded media and methods for reading the information comprising holograms and reflected layers. See Figure 1. A printed ink is formed of infrared fluorescent ink at col. 8, lines 54-55 and emits fluorescence at col. 9, lines 14-16. It would have been obvious to one of ordinary skill in the art to modify the laminate of Takase to include fluorescent ink emitting fluorescence because Tahara teaches printed ink layers may add fluorescent pigments in order for the ink to emit fluorescence for easy discrimination from the rest of a recorded medium as taught by Tahara at col. 9, lines 12-55.

13. Claims 22-24, and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,750,267 to Takase et al. in view of USPN 5,047,272 to Hassel et al. and further in view of USPN 4,812,034 to Mochizuki et al.

Takase is relied upon above. Takase does not teach a brightness-enhanced, linearly reflective polarizer, or chlosteric liquid crystal layer or plates of instant claims 22-24 and 41-43. Mochizuki teaches a projection type liquid crystal display device. Mochizuki uses a cholesteric-nematic phase transition type liquid crystal (equivalent to linearly reflective polarizer/chlosteric liquid crystal layer of instant claims 23-24 and 42-43) with positive dielectric anisotropy used in a projection type liquid crystal display device sealed between

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transparent substrates 13 and 14 and transparent electrodes 15 and 16 (col. 4, lines 9-20). See Figures 2a and 2b. Mochizuki provides the advantage of using this type of liquid crystal allows for a bright and high information contents display with a compact (equivalent to brightness-enhanced plate of instant claims 22 and 41), light, and low cost device and allows machinery input and thus simultaneous display at remote places, such as remote conference rooms or remote notice boards, in bright locations. The liquid crystal panel contains substrates. See Abstract, col. 2, lines 1-35, and col. 4, lines 37-40. It would have been obvious to one of ordinary skill in the art to modify the laminate of Takase to include a linearly reflective polarizer and/or chlosteric liquid crystal layer because Mochizuki teaches including such material allows a bright and high information contents display with a compact, light, and low cost device and allows machinery input and thus simultaneous display at remote places, such as remote conference rooms or remote notice boards, in bright locations as cited above.

14. Claims 21 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,750,267 to Takase et al. in view of USPN 5,047,272 to Hassel et al. and further in in view of USPN 6,361,838 to Miyatake et al.

Takase is relied upon above. Takase does not teach a retardation plate. Miyatake teaches an optical film/member that may be used to produce a multilayer structure by providing optical layers on sides of a polarizing/retardation film that includes absorption types like hydrophilic polymer films of PVA that have been stretched. See col. 7, lines 39-65, and col. 8, lines 5-54. Such optical films, like those of instant claims 10 and 30 may be used to produce the following types of films: absorption type, reflection type, scattering type polarizers, retardation films including a quarter-wavelength plate, a half-wavelength plate, a retardation film comprising a

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uni- or biaxially or otherwise stretched film, a film comprising a film which has undergone inclined orientation, i.e., which has undergone molecular orientation also in the thickness direction, a film comprising a liquid crystal polymer, a film in which a retardation caused by a viewing angle or birefringence is compensated for, and a film comprising two or more of these retardation films superposed on each other. See col. 8, lines 1-54. Miyatake teaches a polarizing film also includes a polarizing film comprising any of the above-described polarizing films and a transparent protective layer formed on one or each side thereof for the purpose of protection against water. The protective layer may be, for example, a coating layer of a plastic or a laminated film layer. Refer to col. 8, lines 28-30. It would have been obvious to one of ordinary skill in the art to modify the laminate of Takase to include a retardation plate because Miyatake teaches using a retardation, half-wavelength film/plates are conventional to use in optical films for the purpose of providing retardation caused by a viewing angle or birefringence and is compensated for as taught by Miyatake above.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- USPN 6,052,813 to Nagasaki et al. teaches an easily removable protective film and printing on a surface of an optical member.
- USPN 6,063,174 to Shirota et al. teaches a transparent ink for use in ink jet recording for liquid crystal displays.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tamra L. Dicus  
Examiner  
Art Unit 1774

October 18, 2003

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*Cynthia H. Kelly*